

### See Learning in a Whole New Light

**Dr. Clifford Houston** 

Deputy Associate Administrator for Education March 21, 2003



# **Agency Mission**



# Inspire & Motivate Engage the Public





# **Blueprint for Education**

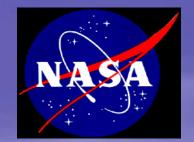
"In this great land called America, no child will be left behind."

- President George W. Bush



National Science Foundation





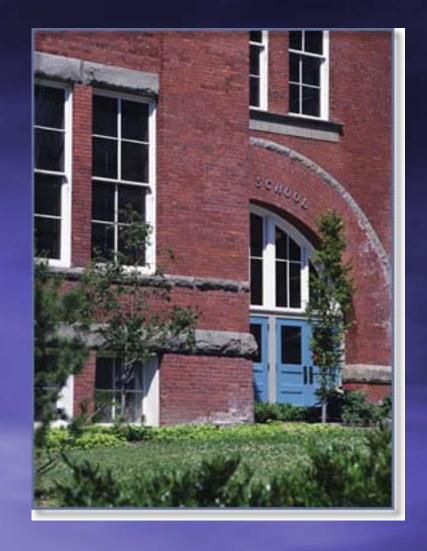
National Aeronautics and Space Administration



United States
Department of
Education



Our Nation's education system is failing to equip our children with essential mathematics and science skills





Our Nation fails to produce enough Scientists, Mathematics, Engineers and Technologists needed to support National Economic and Security Needs





NASA is uniquely positioned to be able to positively effect an increase in the numbers of scientists, mathematicians, engineers and technologists





NASA can and must leverage its unique Enterprise activities to "Inspire the Next Generation of Explorers" like it has not done before.







#### **NASA Education Priorities**



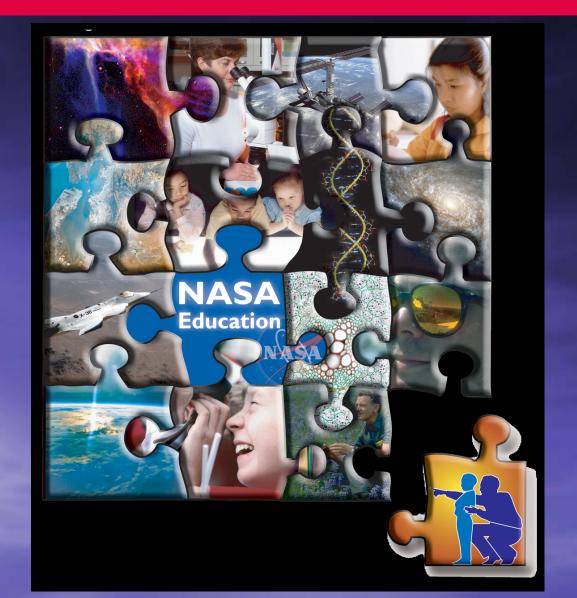
# **Expand STEM pipeline** (Pre-college)

Increase STEM workforce (Post-secondary)





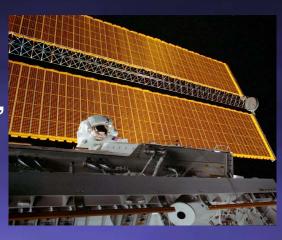
# NASA Education Enterprise





#### NASA Education Goals

1) MOTIVATE STUDENTS TO PURSUE CAREERS IN SCIENCE, MATHEMATICS, ENGINEERING, AND TECHNOLOGY



3) ENSURE THAT WE ARE INVESTING THE TAXPAYER'S RESOURCES WISELY

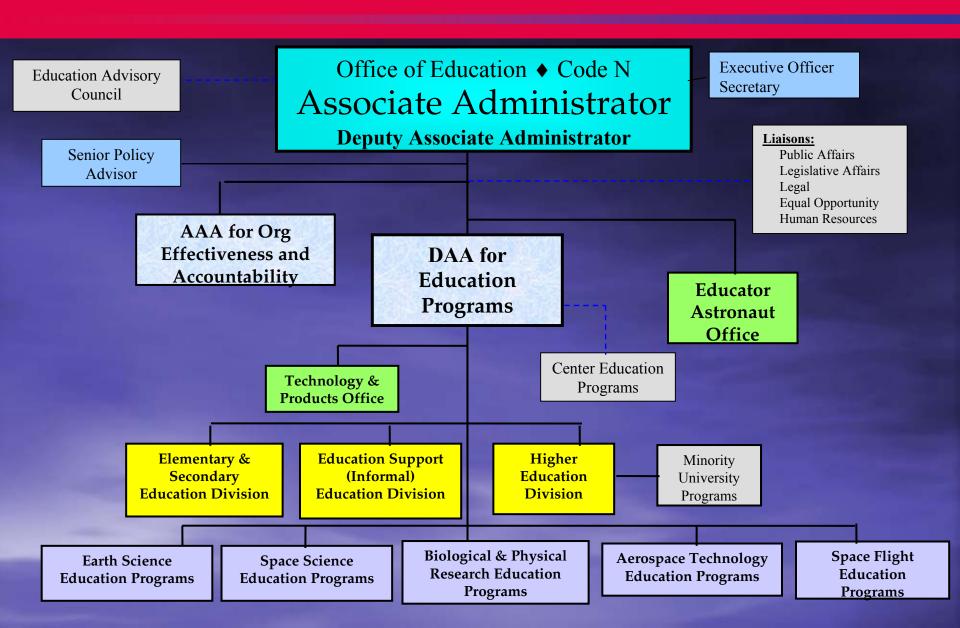
2) PROVIDE EDUCATORS
WITH UNIQUE TEACHING
TOOLS AND COMPELLING
TEACHING EXPERIENCES



4) ENGAGE MINORITY & UNDERREPRESENTED STUDENTS, EDUCATORS, AND RESEARCHERS IN NASA'S EDUCATION PROGRAM



# **Enterprise Organization**





#### **New Initiatives for FY03**

#### **Four Educational Programs**



Explorer Schools

Explorer Institutes

Science and Technology Scholarship Program

Educator Astronaut Program



# NASA Explorer Schools





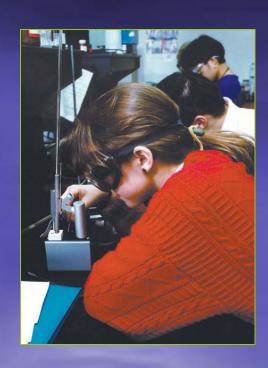
# NASA Explorer Institutes





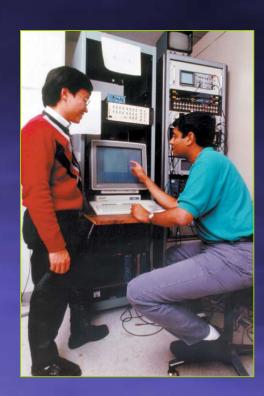


# Science and Technology Scholarship Program







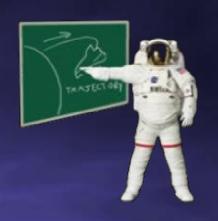




Who?



A fully qualified, permanent member of NASA's Astronaut Corps



A leader who creates revolutionary ways to share the space experience with students



An astronaut who inspires the next generation of explorers



WHY?



Motivate students and educators to pursue science, technology, engineering, and mathematics

Enable educators to affect a larger, national audience





#### **Qualifications**

- U.S. citizen
- **Certified K-12 educator**
- Minimum three years classroom teaching within the past four years



- Bachelors degree from accredited college or university
  - mathematics
  - physical science
  - biological science
  - engineering or technology-related field
  - education with a concentration in above fields
- Ability to pass NASA space flight physical



**Application** 

#### A complete application includes:

- Resume and supplemental form
- **Medical forms**
- Three essays
- Four letters of recommendation
- Copy of academic transcripts



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**Applications due April 30, 2003** 



**Selection** 

Final selection made by Johnson Space Center



Educator
Astronaut
Candidates
announced
Early 2004

Join the NASA Team at Johnson Space Center in Houston, Texas



Become part of the U.S. Civil Service Undergo intensive training



### **Assignments**





#### Join the Earth Crew!

#### Join Earth Crew

 Motivate students to learn about space, aeronautics and science



- Follow the astronauts' training and exercise
- Design Earth Crew mission patches
- Recruit, engage and inspire!
- Learn about NASA careers



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Who can nominate at teacher?

Students, educators, friends, and the general public can nominate educators.



Nominee chooses whether to apply.



#### **Other NASA Careers**

Aerospace, Mechanical, Electrical, and Computer

**Engineering** 

**Astronomy** 

**Physical Science** 

Geology

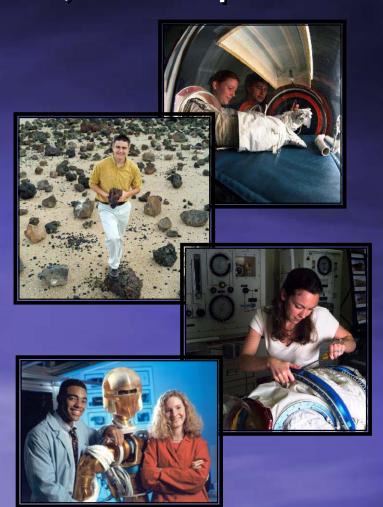
**Physics** 

**Spaceflight Hardware Design** 

**Biological Science** 

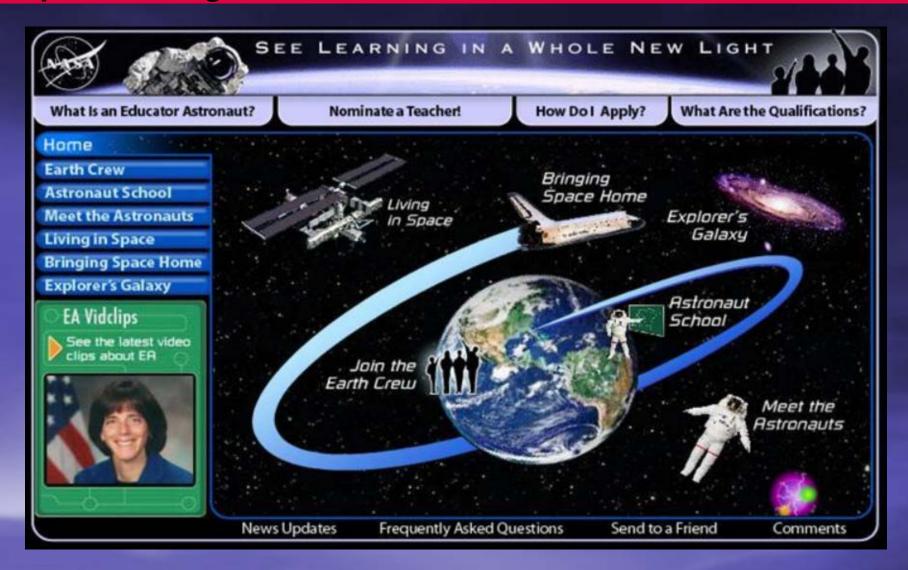
Computer Science

**Financial Management** 





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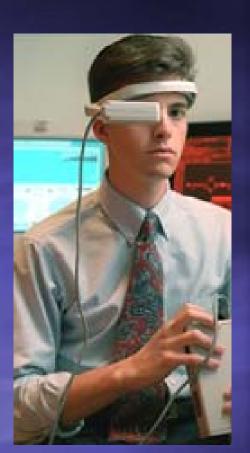


#### **Criteria for Educational Programs**



- 1) Customer Focused
- 2) NASA Content
- 3) NASA pipeline
- 4) Diversity

- 5) Evaluation
- 6) Partnerships/sustainability





## **Space Grant Assistance**

#### How can you help Code N?

- Distribute information concerning NASA programs
- Establish local efforts for National campaigns
- Collaborate with local Informal Education communities
- Continue programs that address the STEM pipeline shortage

